

FEVAR patients (area under the curve = 0.87 for both groups). There were 39% (n = 177), 41% (n = 187), and 20% (n = 95) low-risk, intermediate-risk, and high-risk patients, respectively. The comparative outcomes of open vs FEVAR by risk strata are presented in the Table.

Conclusions: Favorable outcomes for FEVAR observed in high-risk patients likely reflect differences in clinical presentation; however, this analysis of early experience with FEVAR suggests comparable outcomes for open and FEVAR repair in low-risk and intermediate-risk patients.

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Aortoiliac Occlusive Disease: Role of Open Surgery in the Endovascular Era [◇]

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Objectives: Aortoiliac occlusive disease is a common manifestation of peripheral vascular disease. As reflected by the changes made in the Inter-Society Consensus for the Management of Peripheral Arterial Disease II guidelines, endovascular therapy is now the preferred modality for treatment in most patients. Some patients are not candidates for an endovascular approach due to their anatomy or prior interventions. Other patients may be better managed with open repair to preserve future endovascular options and allow access for contralateral infrainguinal interventions. This study investigated the indications for and outcomes of open operations for aortoiliac occlusive disease in a contemporary patient series.

Methods: Two affiliated hospitals' prospective databases were surveyed retrospectively. All patients who underwent an open operation for aortoiliac occlusive disease during a 5-year period from 2008 to 2012 were included in the analysis. Statistical analysis was performed using the Student *t*-test and Kaplan-Meier techniques.

Results: We identified 87 patients (69% male) who had open operations for aortoiliac occlusive disease. Mean follow up was 17.4 months. Average patient age was 64 years, and mean American Society of Anesthesiologists score was 3.1. Procedures included 16 aortobifemoral bypasses, 4 aortic endarterectomies, 61 extra-anatomic bypasses, 6 other bypasses, and 9 involved a combined endovascular procedure. The primary indications for surgery were chronic occlusive disease in 79 patients (22 rest pain, 18 tissue loss, 39 claudication) and acute limb ischemia with threatened limb in eight patients. The main indication for open operation in (84%) of patients was extent of disease. Twenty-one percent underwent unsuccessful attempts at

Table. Patency rates

Patients	1-year primary patency, % (95% CI)	1-year primary assisted patency, % (95% CI)	1-year secondary patency, % (95% CI)
All patients	90 (82-96)	94 (87-98)	95 (88-99)
Bypass			
AFB	88 (60-98)	94 (68-99)	100 (76-100)
Extra-anatomic	92 (81-97)	92 (81-97)	93 (83-98)
Endarterectomy	100 (40-100)	100 (40-100)	100 (40-100)
Other bypass	100 (52-100)	100 (52-100)	100 (52-100)

AFB, Aortobifemoral bypass; CI, confidence interval.

endovascular treatment before open repair. Previous interventions were common: 22% had prior failed bypass and 38% had prior failed endovascular intervention. Patency rates at 1 year were as noted in the Table. The complication rate was 43%, and most were wound related. Major amputation rate was 8%, and perioperative mortality was 3.4% (n = 3).

Conclusions: In the setting of the current "endovascular first" paradigm, open surgery for aortoiliac occlusive disease remains an important revascularization option, especially for patients with diffuse disease. Short-term patency rates remain excellent, even in these patients who were either not candidates for or failed endovascular treatment. Future vascular trainees will continue to need these options in their armamentarium.

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Factors Impacting Cost in Elective Endovascular and Open Abdominal Aortic Aneurysm Repairs at Two Centers[†]

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Objectives: Cost data from two academic medical centers were examined to determine patient characteristics and/or clinical events that are predictive of high cost hospitalizations after elective endovascular (EVAR) and open (OAAA) abdominal aortic aneurysm repair. Elements of patient selection, operative performance, and postoperative complications were examined for their influence on cost.

Table. Cost data from two academic medical centers

EVAR patient				OAAA patient			
Center A factors	P	Center B factors	P	Center A	P	Center B	P
Iliac aneurysm	.01	Transferred	.01	Red EF	.04	CHF	.03
CABG/PTCA <5 years	.04	AAA diameter	.04	COPD – meds	.02	β-Blockers (protective)	.04
Reduced EF	.04			Prior bypass	.01	COPD-all	.01
Elevated creat	.02			Transfer	.048		
				Age	.002		
EVAR procedural				OAAA procedural			
Cover Int Iliac	.006	Graft vendor	.007	Anesthesia	.05	Exposure	<.0001
Other art proc	.002	OR coiling	.03	Exposure	.002	EBL	.03
EBL	<.0001	Unplanned ext	.01	Clamp position	.0001	IVF	.0004
IVF	<.0001	Art inj reg ext	.01	EBL	.004	Proc time	<.0001
Proc time	<.0001	EBL	.0007	IVF	.0003		
		IVF	.002	Proc time	.0004		
		Proc time	.0001				
Dysrhythmia	.01	Return OR	.01	Dysrhythmia	<.0001	Dysrhythmia	<.0001
Resp comp	.02	ICU stay	.049	Resp comp	<.0001	Resp comp	<.0001
Renal failure	.04			Renal failure	.008	Renal failure	.0005

AAA, Abdominal aortic aneurysm; CABG, coronary artery bypass grafting; COPD, chronic obstructive pulmonary disease; EBL, estimated blood loss; EF, ejection fraction; EVAR, endovascular aneurysm repair; ICU, intensive care unit; OAAA, open abdominal aortic aneurysm repair; OR, operating room; PTCA, percutaneous transluminal angioplasty.

◇ Eastern Vascular Society

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